THAT WHICH IS CLAIMED:

- 1. An acetabular shell impactor, comprising:
 - an impactor body having first and second ends;
 - a releasable connection for attaching an acetabular shell to said impactor;
- a remote actuator for releasing the connection between said shell and said impactor; and
 - said remote actuator manipulated distant said first and second ends.
- The acetabular impactor according to claim 1, wherein:
 said remote actuator is swingable independent of said impactor body.
- 3. The acetabular impactor according to claim 1, wherein said actuator includes a mechanical drive.
- 4. The acetabular impactor according to claim 3, wherein said mechanical drive can transfer rotational motion from one axis to another.
- 5. The acetabular impactor according to claim 4, wherein said mechanical drive includes a universal-joint.
- 6. The acetabular impactor according to claim 4, wherein said mechanical drive includes a bevel gear.
- 7. The acetabular impactor according to claim 3, wherein at least a portion of the actuator is within said body.
- The acetabular impactor according to claim 7, wherein said body is rigid.
- 9. The acetabular impactor according to claim 1, wherein said releasable connection comprises a threaded connection.

10. An acetabular impactor, comprising:

first and second ends;

said first end for receiving an impact of a hammering device;

said second end having a connection for attaching an acetabular shell thereto, said connection having an attachment axis;

a first leg extending from said connection and parallel to said attachment axis;

a second leg, acutely angled with respect to said first leg, and extending from said first leg;

a third leg, extending at an angle with respect to said second leg; and a fourth leg, acutely angled with respect to said third leg, and extending parallel and opposite to said first leg.

- 11. The acetabular impactor of claim 10, wherein the angle between said second and third legs is a right angle and said second and third legs are substantially the same length.
- 12. The acetabular impactor of claim 11, wherein said legs are rigid and of a fixed length.
- 13. The acetabular impactor of claim 12, wherein said first and fourth legs are coaxial.
- 14. The acetabular impactor of claim 11, wherein said acute angles may be varied.

- 15. The acetabular impactor of claim 14, wherein said first and fourth legs are separate members from said second and third legs, and wherein said acute angles may be varied by varying the angles between said separate legs.
- 16. The acetabular impactor of claim 10, wherein:

said shell has an inner radius; and

the length of said first leg is less than said inner radius.

- 17. The acetabular impactor of claim 16, wherein the length of said second leg is greater than said inner radius.
- 18. The acetabular impactor of claim 16, wherein said length of said first leg being the smallest length that does not cause impingement of said shell and said second leg.
- 19. The acetabular impactor of claim 10, further comprising a navigation frame.
- 20. An acetabular impactor, comprising:

first and second ends;

said first end for receiving an impact of a hammering device;

said second end having a connection for attaching an acetabular shell having an inner radius thereto;

a first leg extending from said connection and parallel to said attachment axis;

a second leg, acutely angled with respect to said first leg, and extending from said first leg;

the length of said first leg is less than said inner radius.